

AMENDMENTS TO THE CLAIMS

Please replace the previous listing of claims with the following listing of claims.

Listing of Claims

1. (Currently Amended) An inflator module for inflating an airbag with gas, comprising:
an elongate housing including a bottom wall, a top wall defining an opening through which gas flows to inflate the airbag and side walls connected to said bottom and top walls to thereby define a reaction chamber between said bottom wall, said top wall and said side walls; and
propellant extending longitudinally in said housing and generating gas when burning ~~;~~ and a coating coated on said propellant and comprising igniter material, said propellant being spaced apart from said top wall to define an unoccupied subchamber between said top wall and said propellant, said subchamber being a portion of said reaction chamber.
2. (Original) The inflator module of claim 1, wherein said propellant has a substantially uniform cross-sectional shape in a longitudinal direction of said propellant.
3. (Original) The inflator module of claim 1, wherein said propellant has a length in the longitudinal direction exceeding ten times a width or thickness of said propellant in a direction transverse to the longitudinal direction.
4. (Currently Amended) The inflator module of claim 1, ~~wherein said housing includes an opening through which gas flows to inflate the airbag~~ further comprising a coating coated on said propellant and comprising igniter material, said subchamber being situated between said top wall and said coating.
5. (Currently Amended) The inflator module of claim ~~[[4]]~~ 1, wherein said opening is elongate and oriented in the same direction as said propellant.
6. (Currently Amended) The inflator module of claim 4, further comprising an elongate screen arranged adjacent said opening and opposite said coating such that said screen faces said coating, said subchamber being situated ~~and a chamber is defined in said housing~~ between said screen and said propellant coating.

7. (Currently Amended) The inflator module of claim ~~[[1]]~~ 4, wherein said coating is substantially coextensive with said propellant in a longitudinal direction such that upon ignition of said igniter material, said propellant begins to burn across its entire length.

8. (Previously Presented) The inflator module of claim 7, wherein said coating is arranged on portions of said propellant not in contact with said housing such that said propellant is completely enclosed by said housing and said coating.

9. (Currently Amended) The inflator module of claim 7, wherein said ~~housing includes an opening through which gas flows to inflate the airbag and an~~ bottom wall is elongate ~~wall opposite said opening~~, said propellant being affixed to said bottom wall and said coating being arranged between said propellant and said ~~opening~~ top wall such that upon ignition of said igniter material, said propellant burns in a direction toward said bottom wall.

10. (Currently Amended) The inflator module of claim ~~[[1]]~~ 4, wherein said coating is arranged on portions of said propellant not in contact with said housing such that said propellant is completely enclosed by said housing and said coating.

11. (Previously Presented) The inflator module of claim 10, wherein said propellant extends in a longitudinal direction of said housing, said coating being substantially coextensive with said propellant such that upon ignition of said igniter material, said propellant begins to burn across its entire length.

12. (Previously Presented) The inflator module of claim 10, wherein said propellant and said coating have a length in the longitudinal direction exceeding ten times a width or thickness of said propellant and said coating in a direction transverse to the longitudinal direction.

13. (Currently Amended) The inflator module of claim 10, ~~wherein said housing includes an opening through which gas flows to inflate the airbag~~, further comprising an elongate screen arranged adjacent said opening and opposite said coating such that said screen faces said coating, said subchamber being situated ~~and a chamber is defined in said housing~~ between said screen and said propellant ~~coating~~.

14. (Currently Amended) The inflator module of claim 13, wherein ~~said housing includes an elongate wall opposite said opening~~, said propellant ~~being~~ is affixed to said bottom wall and said coating ~~being~~ is arranged between said propellant and said ~~opening~~ top wall such that upon ignition of said igniter material, said propellant burns in a direction toward said bottom wall.

15. (Currently Amended) An inflator system arranged in a vehicle for inflating an airbag, comprising:

an elongate housing including a bottom wall, a top wall defining an opening through which gas flows to inflate the airbag and side walls connected to said bottom and top walls to thereby define a reaction chamber between said bottom wall, said top wall and said side walls;

an elongate mass of propellant; and

a layer of igniter material coated on said propellant and being substantially coextensive with said propellant in a longitudinal direction such that upon ignition of said igniter material, said propellant begins to burn across its entire length, said igniter material layer being spaced apart from said top wall to define an unoccupied subchamber between said top wall and said igniter material layer, said subchamber being a portion of said reaction chamber.

16. (Currently Amended) In a vehicle having a passenger compartment, an airbag module to protect an occupant in the passenger compartment in the event of a crash of the vehicle, the module comprising:

an airbag housing;

at least one airbag situated in said airbag housing;

an inflator module arranged in said airbag housing for inflating said at least one airbag, said inflator module comprising an elongate inflator housing including a bottom wall, a top wall defining an opening through which gas flows to inflate said at least one airbag and side walls connected to said bottom and top walls to thereby define a reaction chamber between said bottom wall, said top wall and said side walls and [[:]] propellant extending longitudinally in said inflator housing and generating gas when burning ; ~~and a coating coated on said propellant and comprising igniter material , said propellant being spaced apart from said top wall to define an unoccupied subchamber between said top wall and said propellant, said subchamber being a portion of said reaction chamber;~~

an initiator for initiating said inflator module to produce gas in response to the crash of the vehicle; and

a cover for releasably retaining said at least one airbag in said airbag housing.

17. (Original) The module of claim 16, wherein said propellant has a substantially uniform cross-sectional shape in a longitudinal direction of said propellant.

18. (Currently Amended) The module of claim 16, ~~wherein said inflator housing includes an opening through which gas flows to inflate said at least one airbag~~ further comprising a coating coated on said propellant and comprising igniter material, said subchamber being arranged between said top wall and said coating.

19. (Currently Amended) The module of claim ~~[[18]]~~ 16, wherein said opening is elongate and oriented in the same direction as said propellant.

20. (Currently Amended) The module of claim ~~[[19]]~~ 18, further comprising an elongate screen arranged adjacent said opening and opposite said coating such that said screen faces said coating, ~~said subchamber being situated and a chamber is defined in said inflator housing~~ between said screen and said ~~propellant~~ coating.

21. (Currently Amended) The module of claim ~~[[16]]~~ 18, wherein said coating is substantially coextensive with said propellant in a longitudinal direction such that upon ignition of said igniter material, said propellant begins to burn across its entire length.

22. (Previously Presented) The module of claim 21, wherein said coating is arranged on portions of said propellant not in contact with said inflator housing such that said propellant is completely enclosed by said inflator housing and said coating.

23. (Currently Amended) The module of claim 21, wherein ~~said inflator housing includes an elongate wall opposite said opening~~, said propellant ~~being~~ is affixed to said bottom wall and said coating ~~being~~ is arranged between said propellant and said ~~opening~~ top wall such that upon ignition of said igniter material, said propellant burns in a direction toward said bottom wall.

24. (Currently Amended) The module of claim ~~[[16]]~~ 18, wherein said coating is arranged on portions of said propellant not in contact with said inflator housing such that said propellant is completely enclosed by said inflator housing and said coating.

25. (Previously Presented) The module of claim 24, wherein said propellant extends in a longitudinal direction of said inflator housing, said coating being substantially coextensive with said propellant such that upon ignition of said igniter material, said propellant begins to burn across its entire length.

26. (Currently Amended) The module of claim 24, ~~wherein said inflator housing includes an opening through which gas flows to inflate said at least one airbag~~, further comprising an elongate screen arranged adjacent said opening and opposite said coating such that said screen faces said coating, said subchamber being situated and a chamber is defined in said inflator housing between said screen and said propellant coating.

27. (Currently Amended) The module of claim 26, ~~wherein said inflator housing includes an elongate wall opposite said opening~~, said propellant ~~being~~ is affixed to said wall and said coating ~~being~~ is arranged between said propellant and said opening top wall such that upon ignition of said igniter material, said propellant burns in a direction toward said bottom wall.

28. (Currently Amended) In a vehicle having a passenger compartment, an airbag module to protect an occupant in the passenger compartment in the event of a crash of the vehicle, the module comprising:

an airbag housing;

at least one airbag situated in said airbag housing;

an inflator system arranged in said airbag housing for inflating said at least one airbag, said inflator system comprising an elongate housing including a bottom wall, a top wall defining an opening through which gas flows to inflate said at least one airbag and side walls connected to said bottom and top walls to thereby define a reaction chamber between said bottom wall, said top wall and said side walls;

an elongate mass of propellant; and

a layer of igniter material coated on said propellant and being substantially coextensive with said propellant in a longitudinal direction such that upon ignition of said igniter material, said propellant begins to burn across its entire length, said igniter material layer being spaced apart from said top wall to define an unoccupied subchamber between said top wall and said igniter material layer, said subchamber being a portion of said reaction chamber;

an initiator for initiating said inflator system to produce gas in response to the crash of the vehicle; and

a cover for releasably retaining said at least one airbag in said airbag housing.

29. (Currently Amended) A vehicle including a front, a rear and left and right sides and having a longitudinal direction parallel to the left and right sides, comprising:

an airbag module arranged along one of the left and right sides of the vehicle and including

an airbag housing oriented in the longitudinal direction of the vehicle;

at least one airbag situated in said airbag housing and arranged to inflate along one of the left and right sides of the vehicle;

an inflator module arranged in said airbag housing for inflating said at least one airbag, said inflator module comprising an elongate inflator housing including a bottom wall, a top wall defining an opening through which gas flows to inflate said at least one airbag and side walls connected to said bottom and top walls to thereby define a reaction chamber between said bottom wall, said top wall and said side walls, and propellant arranged in said inflator housing and generating gas when burning, said propellant being oriented in the longitudinal direction of the vehicle, said propellant being spaced apart from said top wall to define an unoccupied subchamber between said top wall and said propellant, said subchamber being a portion of said reaction chamber;

an initiator for initiating said inflator module to produce gas in response to the crash of the vehicle, and

a cover for releasably retaining said at least one airbag in said airbag housing

30. (Original) The vehicle of claim 29, wherein said at least one airbag is a single airbag arranged to extend from a location in front of a B-pillar of the vehicle to a location behind the B-pillar such that said airbag is restrained by the B-pillar upon inflation.

31. (Original) The vehicle of claim 29, wherein said airbag module is mounted to a ceiling of the vehicle.

32. (Previously Presented) The vehicle of claim 29, wherein said airbag module is mounted adjacent to and slightly away from the left or right side of the vehicle.

33. (Currently Amended) The vehicle of claim 29, wherein said inflator module further comprises a coating comprising igniter material coated on said propellant and substantially coextensive with said propellant in the longitudinal direction such that upon ignition of said igniter material, said propellant begins to burn across its entire length, said subchamber being situated between said coating and said top wall.

34. (Currently Amended) The vehicle of claim 29, wherein said inflator module further comprises a coating comprising igniter material coated on portions of said propellant not in contact with said inflator housing such that said propellant is completely enclosed by said inflator housing and said coating, said subchamber being situated between said coating and said top wall.

35. (Currently Amended) A vehicle including a front, a rear and left and right sides and having a longitudinal direction parallel to the left and right sides, comprising:

an airbag module arranged along one of the left and right sides of the vehicle and including

an airbag housing oriented in the longitudinal direction of the vehicle;

at least one airbag situated in said airbag housing and arranged to inflate along one of the left and right sides of the vehicle;

an inflator system arranged in said airbag housing for inflating said at least one airbag, said inflator system comprising an elongate inflator housing including a bottom wall, a top wall defining an opening through which gas flows to inflate said at least one airbag and side walls connected to said bottom and top walls to thereby define a reaction chamber between said bottom wall, said top wall and said side walls and propellant oriented in the longitudinal direction of the vehicle ~~and a layer of igniter material arranged on said propellant and being substantially coextensive with said propellant in the longitudinal direction such that upon ignition of said igniter material, said propellant begins to burn across its entire length,~~ said propellant being spaced apart from said top wall to define an unoccupied

subchamber between said top wall and said propellant, said subchamber being a portion of said reaction chamber;

an initiator for initiating said inflator system to produce gas in response to the crash of the vehicle; and

a cover for releasably retaining said at least one airbag in said airbag housing;

36. (Original) The vehicle of claim 35, wherein said at least one airbag is a single airbag arranged to extend from a location in front of a B-pillar of the vehicle to a location behind the B-pillar such that said airbag is restrained by the B-pillar upon inflation.

37. (Original) The vehicle of claim 35, wherein said airbag module is mounted to a ceiling of the vehicle.

38. (Currently Amended) The vehicle of claim 35, wherein said airbag module is mounted adjacent to and slightly away from the left or right side of the vehicle.

39. (Currently Amended) An inflator module for inflating an airbag with gas, comprising:
an elongate housing including an elongate bottom wall, a top wall having an opening through which gas flows to inflate the airbag, a pair of opposed longitudinally extending walls connected to said bottom ~~wall~~ and top walls and opposed lateral end walls connected to said bottom ~~wall~~ and top walls to thereby define a reaction chamber between said bottom wall, said top wall, said longitudinally extending walls and said lateral walls; and

propellant arranged in said reaction chamber and generating gas when burning, said propellant being arranged along substantially the entire length of said longitudinally extending walls; ~~and a coating coated on an upper surface of said propellant and comprising igniter material~~, said propellant being spaced apart from said top wall to define an unoccupied subchamber between said top wall and said propellant, said subchamber being a portion of said reaction chamber.

40. (Original) The inflator module of claim 39, wherein said propellant has a substantially uniform cross-sectional shape in a longitudinal direction of said propellant.

41. (Original) The inflator module of claim 39, wherein said propellant has a length in the longitudinal direction exceeding ten times a width or thickness of said propellant in a direction transverse to the longitudinal direction.

42. (Currently Amended) The inflator module of claim 39, ~~wherein said housing includes an opening opposite said bottom wall through which gas flows to inflate the airbag~~ further comprising a coating coated on an upper surface of said propellant and comprising igniter material, said subchamber being situated between said top wall and said coating.

43. (Currently Amended) The inflator module of claim ~~[[42]]~~ 39, wherein said opening is elongate and oriented in the same direction as said propellant.

44. (Currently Amended) The inflator module of claim ~~[[42]]~~ 39, further comprising an elongate screen arranged adjacent said opening and opposite said propellant, said subchamber being situated ~~such that a chamber is defined in said housing~~ between said screen and said propellant.

45. (Currently Amended) The inflator module of claim ~~[[39]]~~ 42, wherein said coating is substantially coextensive with said propellant in a longitudinal direction such that upon ignition of said igniter material, said propellant begins to burn across its entire length.

46. (Currently Amended) The inflator module of claim ~~[[39]]~~ 42, wherein said coating is arranged on portions of said propellant not in contact with said bottom wall, said longitudinally extending walls and said lateral walls such that said propellant is completely enclosed by said housing and said coating.

47. (Currently Amended) The inflator module of claim 45, wherein ~~said housing includes an opening in a top wall opposite said bottom wall through which gas flows to inflate the airbag~~, said propellant ~~being~~ is affixed to said bottom wall and said coating ~~being~~ is arranged between said propellant and said ~~opening top wall~~ such that upon ignition of said igniter material, said propellant burns in a direction toward said bottom wall.

48. (Currently Amended) An inflator module for inflating an airbag with gas, comprising:

an elongate housing; and

propellant extending longitudinally in said housing and generating gas when burning; ~~and igniter material arranged on said propellant and substantially coextensive with said propellant in a longitudinal direction such that upon ignition of said igniter material, said propellant begins to burn across its entire length;~~

said housing including a top wall having an opening through which gas flows to inflate the airbag and an elongate a bottom wall opposite said opening top wall, said propellant being affixed to said bottom wall and said igniter material being arranged between said propellant and said opening such that upon ignition of said igniter material, said propellant burns to burn in a direction toward said bottom wall, said propellant being spaced apart from said top wall to define an unoccupied chamber between said top wall and said propellant.

49. (Currently Amended) An inflator module for inflating an airbag with gas, comprising:
an elongate housing;

propellant extending longitudinally in said housing and generating gas when burning; and

igniter material arranged on portions of said propellant not in contact with said housing such that said propellant is completely enclosed by said housing and said igniter material,

said housing including a top wall having an opening through which gas flows to inflate the airbag and an elongate a bottom wall opposite said opening top wall, said propellant being affixed to said bottom wall and said igniter material being arranged between said propellant and said opening top wall such that upon ignition of said igniter material, said propellant burns in a direction toward said bottom wall, said igniter material being spaced apart from said top wall to define an unoccupied chamber between said top wall and said igniter material.

50. (Currently Amended) An inflator module for inflating an airbag with gas, comprising:

an elongate housing including ~~an elongate a bottom wall~~, a top wall having an opening through which gas flows to inflate the airbag, a pair of opposed longitudinally extending walls connected to said bottom wall and opposed lateral end walls connected to said bottom wall to thereby define a reaction chamber between said bottom wall, said top wall, said longitudinally extending walls and said lateral walls; and

propellant arranged in said reaction chamber and generating gas when burning, said propellant being arranged along substantially the entire length of said longitudinally extending walls; ~~and igniter~~

~~material arranged on said propellant and being substantially coextensive with said propellant in a longitudinal direction such that upon ignition of said igniter material, said propellant begins to burn across its entire length, said propellant being spaced apart from said top wall to define an unoccupied chamber between said top wall and said propellant,~~

~~said housing including an opening in a top wall opposite said bottom wall through which gas flows to inflate the airbag, said propellant being affixed to said bottom wall and said igniter material being arranged between said propellant and said opening such that upon ignition of said igniter material, said propellant burns to burn in a direction toward said bottom wall.~~

51. (New) The vehicle of claim 35, further comprising a layer of igniter material arranged on said propellant and being substantially coextensive with said propellant in the longitudinal direction such that upon ignition of said igniter material, said propellant begins to burn across its entire length, said subchamber being situated between said top wall and said igniter material layer.

52. (New) In a vehicle having a passenger compartment, an airbag module to protect an occupant in the passenger compartment in the event of a crash of the vehicle, the module comprising:

an airbag housing;

at least one airbag situated in said airbag housing;

an inflator module arranged in said airbag housing for inflating said at least one airbag, said inflator module comprising an elongate inflator housing and propellant extending longitudinally in said inflator housing and generating gas when burning, said inflator housing including an opening through which gas flows to inflate said at least one airbag, said opening being elongate and oriented in the same direction as said propellant;

an initiator for initiating said inflator module to produce gas in response to the crash of the vehicle;

a cover for releasably retaining said at least one airbag in said airbag housing; and

an elongate screen arranged adjacent said opening in said inflator housing and opposite said propellant such that said screen faces said propellant and a chamber is defined in said inflator housing between said screen and said propellant.

53. (New) In a vehicle having a passenger compartment, an airbag module to protect an occupant in the passenger compartment in the event of a crash of the vehicle, the module comprising:

an airbag housing;

at least one airbag situated in said airbag housing;

an inflator module arranged in said airbag housing for inflating said at least one airbag, said inflator module comprising an elongate inflator housing, propellant extending longitudinally in said inflator housing and generating gas when burning, said inflator housing including an opening through which gas flows to inflate said at least one airbag;

an initiator for initiating said inflator module to produce gas in response to the crash of the vehicle;

a cover for releasably retaining said at least one airbag in said airbag housing; and

an elongate screen arranged adjacent said opening in said inflator housing and opposite said propellant such that said screen faces said propellant and a chamber is defined in said inflator housing between said screen and said propellant.

54. (New) An inflator module for inflating an airbag with gas, comprising:

an elongate housing including an elongate bottom wall, a pair of opposed longitudinally extending walls connected to said bottom wall and opposed lateral end walls connected to said bottom wall to thereby define a reaction chamber between said bottom wall, said longitudinally extending walls and said lateral walls, said housing including an opening opposite said bottom wall through which gas flows to inflate the airbag;

propellant arranged in said reaction chamber and generating gas when burning, said propellant being arranged along substantially the entire length of said longitudinally extending walls; and

an elongate screen arranged adjacent said opening and opposite said propellant such that a chamber is defined in said housing between said screen and said propellant.